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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,154	09/09/2003	Thomas Sheng	3722-0159P	1012

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EXAMINER

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>10/657,154</p>	<p>Applicant(s)</p> <p>SHENG ET AL.</p>	
	<p>Examiner</p> <p>Thomas A. Morrison</p>	<p>Art Unit</p> <p>3653</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 14-15 and 17-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species I, the embodiment shown in Figs. 1-5, in the reply filed on February 14, 2005 is acknowledged. The traversal is on the ground(s) that it should be no undue burden on the examiner to consider all of the claims in the single application. This is not found persuasive because Figs. 1-18 of the instant application show six (6) patentably distinct species with substantially different structures and operating parameters. Accordingly, there is a substantial burden on the examiner to search for the different structures of the different patentably distinct species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1 and its dependent claims 2-13 and 16, it is unclear in claim 1 which sheets are referred to in line 13. Is the recited "the sheets" referring to the plurality of sheets or only the first sheet and the second sheet? Also, it is unclear in claim 1, what is meant by the recited "the front side of the first sheet is **toward opposite**

directions when it passes through the first passageway at first and second times".
(emphasis added).

Claim 12 recites the limitation "the image processing region" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the image processing region" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 16, it is unclear which sheets are referred to in line 5. Is the recited "the sheets" referring to the plurality of sheets or only the first sheet and the second sheet?

Claim 16 recites the limitation "the duplex sheet-feeding mode" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 9-12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,393,251 (Kono). In particular, the Kono patent discloses all of the limitations of claims 1-3, 9-12 and 16.

Regarding claim 1, Figs. 1-2 and 12(a) –15(c) show an automatic sheet feeder, including

a sheet input tray (2) for storing a plurality of sheets (D) including a first sheet and a second sheet, each of the sheets having a front side and a back side;

a first passageway (starting at 11 and going past 14, 15, 16 and 17), a second passageway (starting near 25 and going past 18 and around the top of roller 5 to 15), and a third passageway (starting near 18 and going past 21 and 27), through which the sheets may be successively fed, the first passageway communicating with the sheet input tray (2), a first end (near 25) of the second passageway selectively communicating (via element 20) with the first passageway, a second end (near 15) of the second passageway communicating with the first passageway, and the third passageway selectively communicating (via element 20) the first passageway;

a sheet-feeding mechanism (including 5) having a duplex sheet-feeding mode for feeding the first sheet successively from the sheet input tray (2) to the first passageway, the second passageway, the first passageway, and the third passageway; and

a sheet output tray (4), in which the sheets are stored, communicating with the third passageway, wherein in the duplex sheet-feeding mode, the front side of the first sheet is toward opposite directions when it passes through the first passageway at first and second times, and when the first sheet is fed to the third passageway, the second sheet is fed to the first passageway. Inherently, the duplexing of the first sheet causes the front side of the first sheet to move toward opposite ends as claimed. Column 6, line 56 to column 10, line 6 explains the duplex process for short sheets. See also Figs. 12-15.

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Regarding claim 2, Figs. 2-3 show that the first passageway includes

a main passageway (starting at 11 and going past 14, 15, and 16 and then over to 17) communicating with the sheet input tray (2);

a first sub-passageway (above 17 and along the lower surface of 20, as shown in Fig. 3) communicating with the main passageway and the second passageway;

a second sub-passageway (above 17 and along the upper surface of 20 and ending at 18, as shown in Fig. 2) communicating with the main passageway and the third passageway; and

a main/sub-passageway guiding rod (20) for switchably guiding the first sheet from the main passageway through the first sub-passageway.

Regarding claim 3, Figs. 2-3 show a first temporary storage region (i.e., the temporary storage region located to the right of 25 in Fig. 2) selectively communicating with the first sub-passageway and the second passageway, the first sheet from the first sub-passageway being temporarily stored in the first temporary storage region; and

a first guiding rod (22) for switchably guiding the first sheet from the first sub-passageway to the first temporary storage region, and guiding the first sheet from the first temporary storage region to the second passageway.

Regarding claim 9, Fig. 2 shows a temporary storage region (i.e., a temporary storage region located to the right of 25) selectively communicating with the first

passageway and the second passageway (via element 22), the first sheet of the first passageway being temporarily stored in the temporary storage region; and

a first guiding rod (22) for switchably guiding the first sheet from the first passageway to the temporary storage region, and guiding the first sheet from the temporary storage region to the second passageway.

Regarding claim 10, Figs. 2-3 show a second guiding rod (20) for switchably guiding the first sheet from the first passageway to the temporary storage region.

Regarding claim 11, Fig. 2 shows that the first passageway is formed with an image processing region (X).

Regarding claim 12, column 4, lines 7-17 disclose a scanning module opposite to the image processing region (X) for scanning the first sheet passing through the image processing region (X).


Regarding claim 16, the Kono apparatus has a sheet-feeding mechanism (including 5) with a simplex sheet-feeding mode, in which the sheet-feeding mechanism feeds the first sheet from the sheet input tray (2) through the first passageway and finally to the sheet output tray (4), a relative order between the first sheet and the second sheet is kept unchanged after the sheets are fed in the simplex sheet-feeding mode or the duplex sheet-feeding mode. The relative order for the duplex mode is shown in Figs. 12-15. This apparatus will also inherently feed simplex documents one by one in the same manner.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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